

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An unlicensed-radio access network connected to a core network portion of a licensed mobile network, said unlicensed-radio access network comprising:
 - an access controller connected to said core network portion,
 - a broadband network connected to said access controller and comprising a plurality of access points, each said access point defining a mini-cell coverage area and supporting an unlicensed-radio interface permitting communication between mobile stations located within a respective mini-cell and said access controller,
 - wherein said access controller:
 - is adapted to communicate directly with mobile stations located in a mini-cell;
 - is associated with one or more location areas in said licensed radio mobile network;
 - and
 - comprises a database for storing an identification of a mobile stations in association with a network address information of said mobile station on said broadband network, wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station individually, said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network.

2. (CANCELLED)
3. (Currently Amended) An access network as claimed in claim 1, wherein said access point controller is adapted to receive from said core network portion a paging message containing the identification of a mobile station located in the associated location area, to identify the network address ~~at least one access point~~ associated with said identified mobile station, and to transmit said paging message to said identified network address ~~at least one access point~~ only.
4. (Previously Presented) An access network as claim 1, wherein said access network controller is adapted to receive from a mobile station a message registering identification data for said mobile station and to store said new identification data in said database in association with address information for said mobile station on said broadband network.
5. (Previously Presented) An access network as claimed in claim 1, wherein said mobile station identification data is the international mobile subscriber identity (IMSI).
6. (CANCELLED)
7. (CANCELLED)
8. (CANCELLED)
9. (Previously Presented) An access network as claimed in claim 1, wherein said access network controller is adapted to determine whether a connection with said mobile station is maintained and to delete said identification data on determining that said connection is no longer maintained.

10. (CANCELLED)

11. (CANCELLED)

12. (CANCELLED)

13. (CANCELLED)

14. (Currently Amended) A method in an access controller of an unlicensed-radio access network ~~wherein comprising a broadband network with plurality of access points and an~~ said access controller is connected to said a broadband network comprising a plurality of access points and to a core network portion of a licensed-radio cellular network and being adapted to communicate with mobile stations over an unlicensed-radio interface via said access points, said method comprising:

~~said access controller~~ establishing communication with a mobile station using a network address on said broadband network for said mobile station,

receiving identification information specific to a mobile station from said mobile station,

registering said mobile station identification information in association with said mobile station network address on said broadband network,

wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station individually.

determining when a connection established with said mobile station is no longer maintained and deleting said mobile station identification information when it is determined that a connection is no longer maintained.

15. (Currently Amended) A method as claimed in claim 14, further comprising:
receiving in said access controller a message from said core network portion
paging a mobile station,
retrieving mobile station identification information registered for said paged
mobile, and
forwarding said paging message only to the network address identified in
association with said registered mobile station identification information.

16. (Cancelled)

17. (Cancelled)

18. (Previously Presented) An access network as claimed in claim 1, wherein the
broadband network is a fixed broadband network.

19. (Previously Presented) A method as claimed in claim 14, wherein the broadband
network is a fixed broadband network

20. (New) An access controller of an unlicensed-radio access network, said access
controller being connected to a core network portion of a licensed mobile network
and to a broadband network having a plurality of access points, each said access
point defining a mini-cell coverage area and supporting an unlicensed-radio
interface permitting communication between mobile stations located within a
respective mini-cell and said access controller, wherein said access controller:
is adapted to communicate directly with mobile stations located in a mini-
cell;
is associated with one or more location areas in said licensed radio mobile
network;

comprises a database for storing an identification of a mobile station in association with a network address for said mobile station on said broadband network, said network address being unique to said mobile station such as to enable said access controller to page said mobile station individually, said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network.

21. (New) An access controller as claimed in claim 20, further adapted to receive from said core network portion a paging message comprised by the identification of a mobile station located in the associated location area, to identify the network address associated with said identified mobile station, and to transmit said paging message to said identified network address only.
22. (New) An access controller as claimed in claim 20, wherein said mobile station identification data is the international mobile subscriber identity (IMSI).
23. (New) An access controller as claimed in claim 20, wherein said access network controller is adapted to determine whether a connection with said mobile station is maintained and to delete said identification data on determining that said connection is no longer maintained.